

COPY

Appl. No. 09/449,215

#18  
3-7-04

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Samara et al.

Title: A METHOD AND APPARATUS  
FOR SECONDARY CAPTURE  
OF 3D BASED IMAGES ON A  
PICTURE ARCHIVAL AND  
COMMUNICATIONS (PACS)  
SYSTEM

Appl. No.: 09/449,215

Filing Date: 11/24/1999

Examiner: Kim, Chong R.

Art Unit: 2623

<b>CERTIFICATE OF FACSIMILE TRANSMISSION</b>	
I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Alexandria, Virginia on the date below.	
BEVERLY HOPKINS	(Printed Name)
<i>Beverly Hopkins</i>	(Signature)
1-9-04	(Date of Deposit)

DECLARATION UNDER 37 C.F.R. § 1.131

Mail Stop AF  
Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

We, Yaseen Samara, Greg J. Angst and Jerome Knoplioch, state and declare that:

1. We are co-inventors of claims 1-3, 6, 7, 11-14, 17-23, and 26-32 of the above-referenced patent application.
2. Prior to August 30, 1999, we conceived in the United States the invention described and claimed in at least claims 1-3, 6, 7, 11-14, 17-23, and 26-32 of the above-referenced application.
3. Prior to August 30, 1999, we submitted an invention disclosure that evidences the conception of the invention claimed in the above-referenced application.
4. A copy of the invention disclosure is attached hereto as Exhibit B.

-1-

Atty Dkt. No. 066243-0206 / (fka 070191-0237) (15-IS-5290)

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Appl. No. 09/449,215

5. On August 30, 1999, a letter (attached as Exhibit A) was sent to Attorney James G. Morrow enclosing a copy of the invention disclosure of Exhibit B. The letter has been redacted of other invention disclosure titles which were also enclosed with the letter.

6. On September 10, 1999, James G. Morrow accepted the engagement to prepare a patent application based on the disclosure of Exhibit B accorded Docket No. 15-IS-5290 evidenced by the Administration Record (attached as Exhibit C). The Administration Record has been redacted of the agreed upon cost of the deliverables.

7. On November 24, 1999, the above-referenced patent application was filed with the United States Patent and Trademark Office.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

Date 1-7-2004  
By Yaseen Samara  
Yaseen Samara

Date \_\_\_\_\_  
By \_\_\_\_\_  
Greg J. Angst

Date \_\_\_\_\_  
By \_\_\_\_\_  
Jerome Knoplioch

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Appl. No. 09/449,215

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Date \_\_\_\_\_  
By \_\_\_\_\_  
Yaseen Samara

Date 11/7/2004  
By Greg J. Angst  
Greg J. Angst

Date \_\_\_\_\_  
By \_\_\_\_\_  
Jerome Knoplioch

COPY

Appl. No. 09/449,215

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Date \_\_\_\_\_  
By \_\_\_\_\_ Yaseen Samara

Date \_\_\_\_\_  
By \_\_\_\_\_ Greg J. Angst

Date Jan 9, 2004  
By [Signature] Jerome Knoplioch



## EXHIBIT A

[illegible]

James G. Morrow, Esq.  
Foley & Lardner  
777 E. Wisconsin Ave.  
Milwaukee, WI 53202

Re: New Patent Application for  
Workstations  
Our Docket No. 15-IS-5281

**New Patent Application for Workstations**  
**Our Docket No. 15-IS-5282**

**New Patent Application for  
Our Docket No. 15-IS-5288**

**New Patent Application for**  
**Our Docket No. 15-IS-5289**

New Patent Application for Secondary Capture of 3D-Based Images on a PACS System  
Our Docket No. 15-IS-5290

**New Patent Application for  
Workstation  
Our Docket No. 15-IS-5292**

**New Patent Application for  
Our Docket No. 15-IS-5293**

New Patent Application for 'Workstation'  
Our Docket No. 15-IS-5297

Enclosed are copies of the above-referenced invention disclosures, for which patent applications need to be drafted. Please prepare applications for

James G. Morrow, Esq.  
August 30, 1999  
Page 2

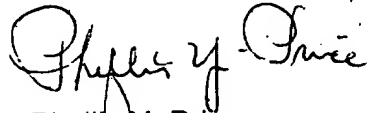
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each of the disclosures in accordance with our established fee arrangements and GEMS guidelines in the regular turnaround time of three months. Please contact the respective inventors directly for assistance as needed.

Also enclosed is an Administration Record sheet for each of the invention disclosures. Please complete items 1. a-b and 2. a of the Records and return them to us for our files within 10 days.

Thank you in advance for your help. Feel free to contact me if you have any questions or comments.

Very truly yours,



Phyllis Y. Price  
Counsel - Intellectual Property

Enclosures

cc: Christian G. Cabou  
Susan M. Donahue  
Alpesh Patel  
Roland Lamer  
Brad Koehl  
Atul Setlur  
Steve Taves  
Yaseen Samara  
Bill Stoval  
Rahul Choudhury  
Frank Owen  
Ronnie Yates  
Dave Kurzynski

INVENTION DISCLOSURE

1. Disclosure ID (for completion by Legal Dept): 15-1S-5290
2. Title: SECONDARY CAPTURE OF 3D-BASED IMAGES ON A PACS SYSTEM
3. Brief description:  
PACS workstation adapted to reconstruct and display 3D images can perform 3D analyses (eg. MIP, MRP) and save the resulting image to the PACS storage
4. Creator(s): (Additional names may be included on an attached "Additional Creators Listing")

Total number of names listed: 4

Full Name: Yaseen Samara Signature \_\_\_\_\_  
Citizenship: \_\_\_\_\_ Date: \_\_\_\_\_  
Social Security Number: \_\_\_\_\_  
Company: \_\_\_\_\_  
Company Phone: 847-704-8575  
Home Phone: \_\_\_\_\_  
Business E-Mail: yaseen.samara@gemed.med.ge.com  
Supervisor: \_\_\_\_\_  
Company employee? ☒ yes ☐ no (if no, employed by: \_\_\_\_\_)  
Home: \_\_\_\_\_

Address \_\_\_\_\_  
City State Country Zip

Full Name: William Stoval Signature \_\_\_\_\_  
Citizenship: \_\_\_\_\_ Date: \_\_\_\_\_  
Social Security Number: \_\_\_\_\_  
Company: \_\_\_\_\_  
Company Phone: \_\_\_\_\_  
Home Phone: \_\_\_\_\_  
Business E-Mail: \_\_\_\_\_  
Supervisor: \_\_\_\_\_  
Company employee? ☒ yes ☐ no (if no, employed by: \_\_\_\_\_)  
Home: \_\_\_\_\_

Address \_\_\_\_\_  
City State Country Zip

5. Project:

5.1 The invention ☒ is ☐ is not part of a ☒ current or ☐ future project/product.

5.2 Project/product name (by which you or your colleagues would recognize it):

Advantage workstation/PACS Integration

5.3 The invention ☐ is ☒ is not ☐ part of or ☐ funded by a government project.

6. Significant Dates (provide approximate dates - "at least as early as" if unsure):

6.1 When and in what form was the invention first disclosed inside the company?

Discussions in early 1999

6.2 Has the invention been disclosed outside the company? If yes, to whom, when, and in what form?

No

6.3 Have any articles describing your invention been published? If yes, list author(s), title of article, publication and date.

No

6.4 Has any product using the invention been sold or offered for sale? If yes, to whom and on what date?

No

6.5 When will (or did) GE begin production of this invention?

Early 2000

7. Description/Disclosure (attach additional pages, sketches, specifications, etc., if available)

7.1 What is the general technological problem the invention is contemplated to overcome?

Conventionally, 3D image processing has been performed on stand-alone workstations, not connected directly to a PACS station. Consequently, any 3D renderings, analyses, and so forth, were stored only on a stand-alone workstation. The PACS system was not capable of receiving reprocessed 3D images, such as MIP, MRP, and similar renderings.



## 7.2 Prior Art:

7.2.1. Identify related invention disclosures, patents or other publications describing similar ideas, and other companies working in the same field. Attach copies, if available.

None known

7.2.2. What is the closest technology, of which you are aware?

Advantage workstation as a stand-alone 3D processing station, and separate PACS systems.

## 7.3 Briefly describe the structure of the invention and how it works.

PACS workstations will be equipped with 3D processing software to receive 2D images and to produce 3D renderings, perform 3D analyses, and so forth. (see IIS-99-13) The 3D analyses, such as MIP, MRP, and so forth, can be performed on the PACS workstation, with the resulting image data being captured and stored back to the PACS storage for ready access by other PACS stations.

## 7.4 How is the invention different/better from prior solutions to this problem?

The PACS system may serve as a very convenient vehicle for processing and transmitting 3D-type projections, analytical projections, and so forth, to various workstations, without requiring those workstations to be equipped for 3D processing and analyses.

**Witnesses:** I have read and understood the information described above and in the attached \_\_\_ pages:

(1) Name: _____	Signature _____
Citizenship: _____	
Social Security Number: _____	Date: _____
Company: _____	
Company Phone: _____	

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(2) Name: \_\_\_\_\_  
Citizenship: \_\_\_\_\_  
Social Security Number: \_\_\_\_\_  
Company: \_\_\_\_\_  
Company Phone: \_\_\_\_\_

Signature \_\_\_\_\_

Date: \_\_\_\_\_

## Additional Creators Listing (delete if not needed)

Full Name: Rahul Choudhury Signature \_\_\_\_\_  
 Citizenship: \_\_\_\_\_ Date: \_\_\_\_\_  
 Social Security Number: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Company Phone: \_\_\_\_\_  
 Home Phone: \_\_\_\_\_  
 Business E-Mail: \_\_\_\_\_  
 Supervisor: \_\_\_\_\_  
 Company employee? ☒ yes ☐ no (if no, employed by: \_\_\_\_\_)  
 Home: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City State Country Zip

Full Name: Frank Owen Signature \_\_\_\_\_  
 Citizenship: \_\_\_\_\_ Date: \_\_\_\_\_  
 Social Security Number: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Company Phone: \_\_\_\_\_  
 Home Phone: \_\_\_\_\_  
 Business E-Mail: \_\_\_\_\_  
 Supervisor: \_\_\_\_\_  
 Company employee? ☐ yes ☐ no (if no, employed by: \_\_\_\_\_)  
 Home: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City State Country Zip

Full Name: \_\_\_\_\_ Signature \_\_\_\_\_  
 Citizenship: \_\_\_\_\_ Date: \_\_\_\_\_  
 Social Security Number: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Company Phone: \_\_\_\_\_  
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 Address \_\_\_\_\_  
 City State Country Zip

Full Name: \_\_\_\_\_ Signature \_\_\_\_\_  
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 Company employee? ☐ yes ☐ no (if no, employed by: \_\_\_\_\_)  
 Home: \_\_\_\_\_  
 Address \_\_\_\_\_

COPY

City

State

Country

Zip

Manual for Global Patent Applications  
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ADMINISTRATION RECORD

Docket No. 15-IS-5290

Preparing IP Attorney: James Morrow, Esq.

1. Preparation Times:

- a. Date outside provider accepted engagement to prepare application: 9/10/99.
- b. Completion date projected at time of acceptance of engagement: 12/10/99.
- c. Date patent application filed in Patent Office (if prepared by outside counsel):  
\_\_\_\_\_.
- (1) Pendency (in days) from acceptance of engagement to filing of patent application:  
\_\_\_\_\_.
- d. Date ready-to-file patent application returned to GE counsel (if to be filed by GE counsel): \_\_\_\_\_.
- (1) Pendency (in days) from acceptance of engagement to return of ready-to-file patent application: \_\_\_\_\_.

2. Preparation Costs:

- a. Agreed upon not-to-exceed cost for the deliverable\*: \_\_\_\_\_.

\*Deliverable refers to those items, such as the patent application, drawings, Information Disclosure Statement, etc., that are to be generated by the provider pursuant to the engagement.

- b. Amount billed for the deliverable will not exceed the agreed upon cost YES \_\_\_ NO\* X

\*If NO, please explain. The 2(a) amount only includes attorney fees.

- 3. Electronic format of the complete application, including drawings, has been provided to GE in the word processing program and version designated by GE: YES \_\_\_ NO\* \_\_\_\_.

\*If NO, please explain.